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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/620,177	07/20/2000	James W. Shade	CTH / 108	3895
26875	7590	07/05/2005	EXAMINER	
WOOD, HERRON & EVANS, LLP			KING, BRADLEY T	
2700 CAREW TOWER			ART UNIT	
441 VINE STREET			PAPER NUMBER	
CINCINNATI, OH 45202			3683	

DATE MAILED: 07/05/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

**Application No.**

09/620,177

**Applicant(s)**

SHADE ET AL.

**Examiner**

Bradley T. King

**Art Unit**

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2005.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1,6-8,10-14,18-21,23-25,27-31 and 33-41 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☒ Claim(s) 21,23 and 24 is/are allowed.
- 6) ☒ Claim(s) 1 6-8 10 18-20 25 27-31 33-41 is/are rejected.
- 7) ☒ Claim(s) 11,13 and 14 is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
  - ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |                                                                                                                        |                                                                                         |
|------------------------------------------------------------------------------------------------------------------------|-----------------------------------------------------------------------------------------|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                                                       | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____                                                |

## DETAILED ACTION

### *Claim Rejections - 35 USC § 102*

The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

Claims 1, 6-8, 10, and 18-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Shade (US# 5842727).

Shade discloses all the limitations of the instant claims including; a generally cylindrical metal sleeve 10 having first and second sides, said sleeve being formed from a sheet material and having at least one rigid and radially inwardly directed annular corrugation 34 formed across its width prior to securement of said sleeve about the first pipe section end, said annular corrugation being located closer to a free end of said sleeve on said first side thereof than a free end of said sleeve on said second side thereof (see figure 1); said annular corrugation being disposed on said first side of said sleeve so as to be oriented perpendicular to a longitudinal axis of said sleeve and configured to cooperatively engage the annular corrugation on the first pipe section end when said sheet is wrapped around the first pipe section end to secure said sleeve on the first pipe section end and thereby prevent separation of said sleeve from the first pipe section (note the claim language does not positively recite the corrugation being engaged with the pipe sections, it is maintained that the corrugation 34 is capable of

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engaging a pipe section); and an elongated tubular bell 12 on said second side of said sleeve having an inner wall of substantially constant diameter along a substantial length thereof and being adapted to slidably receive in an axial direction the second pipe section end within said sleeve, with no portion of said sleeve extending radially inwardly between said annular corrugation and said bell so that the first and second pipe section ends are capable of abutting; whereby said coupling is adapted to interconnect said adjacent ends of said first and second pipe sections.

Regarding claim 6, see flange 36.

Regarding claim 8, Shade further discloses a first pipe section 44 having an annular corrugation capable of engaging the corrugation 34 of the coupling. While the claim language positively recites the pipe ends, the language does not positively recite the connection of the first pipe end to the coupling.

Regarding claim 10, Shade discloses a first gasket 48.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25, 27-31, and 33-41 are rejected under 35 U.S.C. 103(a) as being unpatentable over Claes et al (US#5326138).

Claes et al discloses a coupling including; a generally cylindrical sleeve C having first and second sides, said sleeve being formed from a sheet material and having at least one rigid and radially inwardly directed annular corrugation 46 formed across its width prior to securement of said sleeve about the first pipe section end, said annular corrugation being located closer to a free end of said sleeve on said first side thereof than a free end of said sleeve on said second side thereof; said annular corrugation being disposed on said first side of said sleeve so as to be oriented perpendicular to a longitudinal axis of said sleeve and configured to cooperatively engage the annular corrugation on the first pipe section end when said sheet is wrapped around the first pipe section end to secure said sleeve on the first pipe section end and thereby prevent separation of said sleeve from the first pipe section (note the claim language does not positively recite the corrugation being engaged with the pipe sections, it is maintained that the corrugation 46 is capable of engaging a pipe section); and an elongated tubular bell C on said second side of said sleeve being adapted to slidably receive in an axial direction the second pipe section end within said sleeve, with no portion of said sleeve extending radially inwardly between said annular corrugation and said bell so that the first and second pipe section ends are capable of abutting (note element 10 can allow the ends to abut depending on pipe configuration); a gasket adapted to be disposed about the second pipe section, a radially inwardly directed annular projection 46 disposed about the inner diameter of said bell whereby said coupling is adapted to interconnect said adjacent ends of said first and second pipe sections. Note figure 7 only shows one end of the coupling. Claes et al lack the disclosure of the coupling

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being made of metal. Material selection is well known in the art, and both plastic and metal are known as suitable equivalents. It would have been obvious to one of ordinary skill in the art at the time the invention was made to make the device of Claes et al from metal to simplify manufacture and decrease the cost of the device. Note the instant specification discloses both metal and plastic as preferred materials, and *In re Leshin*, 227 F.2d 197, 125 USPQ 416 (CCPA 1960). Claes et al also lack forming the sleeve from a flat sheet. It is well known in the art to form couplings from sheet material. It would have been obvious to a person of ordinary skill in the art at the time the invention was made to form the coupling of Claes et al from a flat sheet as an obvious manufacturing process allowing the use of inexpensive sheet material, reducing the costs of the device.

Regarding claim 41, Claes et al disclose all the limitations of the instant claim with exception to sealant. The use of sealant is well known in the art to provide a fluid tight connection. It would have been obvious to one of ordinary skill in the art to utilize sealant in the connection of Claes et al to further increase the sealing capabilities of the connection.

Regarding claim 36, Claes et al lack a flat gasket, instead, showing a fluted gasket. Flat gaskets are well known in the art. It would have been obvious to one of ordinary skill in the art to utilize a flat gasket in place of the fluted gasket of Claes et al as an obvious alternate means for providing the seal.

***Claim Rejections - 35 USC § 103***

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The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 25 and 27-30 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shade (US# 5842727) in view of Claes et al (US# 5326138).

Shade discloses all the limitations of the instant claims with exception to a radially inwardly directed projection in the bell. Claes et al disclose a similar coupling and further teach a radially inward projection 46 to add in retaining corrugated pipes of different sizes or to compensate for pipes cut in different places with respect to the corrugations. It would have been obvious to one of ordinary skill in the art at the time the invention was made to utilize the projection taught by Claes et al in the coupling of Shade to provide a greater degree of security in the coupling, thereby improving the performance of the coupling.

#### ***Allowable Subject Matter***

Claims 21 and 23-24 are allowed.

Claims 11 and 13-14 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

### ***Response to Arguments***

Applicant's arguments have been considered but are moot in view of the new ground(s) of rejection.

### ***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.



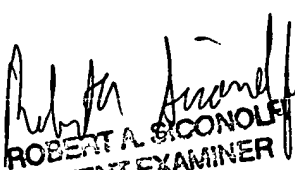
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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bradley T. King whose telephone number is (571) 272-7117. The examiner can normally be reached on 11:00-7:30 M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles Marmor can be reached on (571) 272-7095. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

BTK

  
ROBERT A. SICONOLFI  
PATENT EXAMINER  
6/27/05